

## CLAIMS

What is claimed is:

1. A method for selecting an acoustical response of a  
5 hearing aid, the method comprising the steps of:  
selecting one of multiple acoustical formats of  
the hearing aid by transmitting a command;  
receiving the command at the hearing aid to  
determine which of the multiple acoustical formats is  
10 selected by a user; and  
compensating for a variation in a component of  
the hearing aid device based on a compensation factor  
that is previously programmed in the hearing aid, the  
compensation factor being used to adjust the  
15 acoustical response of the hearing aid so that a  
selected acoustical format of the hearing aid conforms  
to a standard.
2. A method as in claim 1, wherein the command includes  
digital data that is stored in a memory device of the  
20 hearing aid to select an acoustical format.
3. A method as in claim 1, wherein the received command  
includes digital data that is latched to drive at  
least one input to a digital filter that defines the  
25 acoustical response of the hearing aid.
4. A method as in claim 1, wherein the user presses a  
keypad of a wireless transmitter module to select the  
acoustical format and a corresponding command is

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transmitted via a wireless signal to the hearing aid device to program the acoustical format.

5. A method as in claim 1, wherein the hearing aid is disposable.
- 5 6. A method as in claim 1, wherein a selection of a format by a user is permanent so that the hearing aid cannot be reprogrammed.
7. A method as in claim 1, wherein an acoustical format is selected by holding the hearing aid device to a  
10 phone receiver and pressing at least one keypad.
8. A method as in claim 1, wherein the command is transmitted via a wireless signal.
9. A method as in claim 2, wherein the digital data for selecting an acoustical format is stored in a volatile  
15 memory device.
10. A method as in claim 9, wherein the volatile memory device is RAM (Random Access Memory).
11. A method as in claim 1, wherein a selection of a format by a user is temporary so that the hearing aid  
20 can be subsequently reprogrammed with a different acoustical format.
12. A method as in claim 1 further comprising the steps of:

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filtering an acoustical input of the hearing aid  
to detect an audible programming command; and  
programming the hearing aid according to the  
audible programming command.

- 5 13. A method as in claim 12, wherein the audible  
programming command is generated via DTMF (Dual Tone  
Multiple Frequency) signals.
- 10 14. A method as in claim 1 further comprising the step of:  
amplifying an acoustical input of the hearing aid  
based upon a selected acoustical format.
- 15 15. A method as in claim 14 further comprising the step  
of:  
storing a compensation factor in memory of the  
hearing aid corresponding to characteristics of a  
tested component disposed in the hearing aid; and  
modifying an acoustical response of the hearing  
aid based upon the compensation factor.
- 20 16. A method for modifying an acoustical response of a  
hearing aid, the method comprising the steps of:  
testing a component to be used in the hearing aid  
by measuring a characteristic of the component;  
identifying an appropriate compensation factor to  
correct for a variation in the component; and  
storing the compensation factor in a memory  
25 device to compensate for the component disposed in the  
hearing aid.

17. A method as in claim 16 further comprising the step  
of:  
compensating for the variation in the component  
of the hearing aid device so that an overall  
5 acoustical response of the hearing aid conforms to a  
standard.
18. A method as in claim 16, wherein the component is a  
microphone used in the hearing aid.
19. A method as in claim 16, wherein the component is a  
10 speaker used in the hearing aid.
20. A method as in claim 16, wherein the component is an  
assembly including an electronic circuit.
21. A method as in claim 20, wherein the electronic  
circuit includes an amplifier.
- 15 22. A method as in claim 20, wherein the component is an  
assembly including a memory device in which a  
compensation factor is stored.
23. A method as in claim 22, wherein the compensation  
factor is stored in the memory device prior to  
20 assembly of the component in a hearing aid.
24. A method as in claim 16, wherein the memory device is  
EEPROM (Electrically Erasable Programmable Read Only  
Memory).

25. A method as in claim 16 further comprising the step  
of:  
storing encoded data in the memory device for  
selecting one of multiple programmable acoustical  
5 responses of the hearing aid.
26. A method as in claim 16 further comprising the step  
of:  
latching a digitally encoded compensation factor  
into a register device that drives circuitry disposed  
10 between a microphone and speaker of the hearing aid to  
compensate for the variation in the component.
27. A method as in claim 16 further comprising the step  
of:  
testing multiple components of a similar type and  
15 grouping the components based on a corresponding  
deviation from a standard.
28. A method as in claim 27 further comprising the steps  
of:  
assigning a compensation factor to a group of  
20 tested components having similar characteristics; and  
programming the hearing aid that includes a  
component selected from a particular group with a  
corresponding assigned compensation factor.
29. A method as in claim 16, wherein the compensation  
25 factor is used to adjust a gain of the hearing aid  
device.

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30. A method as in claim 16, wherein the compensation factor is used to adjust an offset of the hearing aid device.
31. A method as in claim 20, wherein the characteristic response is an acoustical response.
32. A method for selecting an acoustical response of a hearing aid, the method comprising the steps of:
- selecting one of multiple acoustical formats of the hearing aid by transmitting a command;
  - receiving the command at the hearing aid to determine which of the multiple acoustical formats is selected by a user; and
  - providing a patient with a programmer module that is temporarily coupled to the hearing aid for programming an acoustical format.
33. A method as in claim 32, wherein the command includes digital data that is stored in a memory device of the hearing aid to select an acoustical format.
34. A method as in claim 32, wherein the received command includes digital data that is latched to drive at least one input to a digital filter that defines the acoustical response of the hearing aid.
35. A method as in claim 32, wherein the user presses a keypad of the programmer module to select the acoustical format and a corresponding command is transmitted via a signal to the hearing aid device to program the acoustical format.

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36. A method as in claim 32, wherein the hearing aid is disposable.
37. A method as in claim 32, wherein a selection of a format by a user is permanent so that the hearing aid cannot be reprogrammed.
38. A method as in claim 32 further comprising the step of:  
amplifying an acoustical input of the hearing aid based upon a programmed acoustical format.
39. A method as in claim 32 further comprising the step of:  
storing a compensation factor in memory of the hearing aid corresponding to characteristics of a tested component disposed in the hearing aid; and  
modifying an acoustical response of the hearing aid based upon the compensation factor.